

CLAIMS

1. An apparatus for manufacturing decorative moldings from pieces previously cut or molded from different materials, wherein the apparatus comprises:

- a leveled table;
- a drive system;
- one or more extrusion chambers; and
- a feeding pump.

2. The apparatus according to claim 1, wherein the leveled table includes a low friction surface, independent height settings, one or more guiding strips, locking devices for the guiding strip, and one or more locking grooves.

3. The apparatus according to claim 1, wherein the drive system includes start controls for the drive system, a support arm and a blade.

4. The apparatus according to claim 1, wherein the extrusion chambers include extrusion chamber locking devices, an entrance cavity, an exit cavity and cavity locking devices.

5. The apparatus according to claim 4, further comprising two extrusion chambers, and one intermediate cavity.

6. The apparatus according to claim 1, wherein the feeding pump includes a feeding pump motor, feeding pipes, a feeding pump motor regulator, a manual activation/deactivation control for the pump, and a pressure sensor.

7. The apparatus according to claim 1, further including an extrusion chamber into which a piece to be coated is fed.

8. The apparatus according to claim 1, further including a double extrusion chamber into each of which a piece to be coated is fed.

9. The apparatus according to claim 1, further including a double extrusion chamber into which two or more pieces to be coated is fed.

10. The apparatus according to claim 2, wherein the locking grooves are located at small distance from the surface of the leveled table, such that the guiding strip can be easily installed and removed from the locking groove by using guiding strip locking devices.

11. The apparatus according to claim 2, wherein the guiding strip(s) is aligned parallel to others, when it is desired a multiple feeding into the extrusion chamber(s).

12. The apparatus according to claim 1, wherein the previously cut or molded piece(s) is previously grooved to generate a guide opening, the dimensions of which corresponds to the dimensions of the guiding strip(s), such that both components match to each other and allow the piece(s) to be moved.

13. The apparatus according to claim 3, wherein the blade overlaps a small distance over the guiding strip and, upon placing the piece to be coated on the guiding strip, it contacts one of the ends of the piece to be coated and on one of the sides of the blade, offering support.

14. The apparatus according to claim 3, wherein the blade is attached to the drive system by a support arm.

15. The apparatus according to claim 3, wherein the drive system can be electromechanical, pneumatic or a combination of both, and clears the low friction surface of the leveled table.

16. The apparatus according to claim 1, wherein the extrusion chambers operate individually.

17. The apparatus according to claim 4, wherein the extrusion chamber(s) consist of an open drawer having an entrance cavity, an exit cavity, and a third optional cavity, called intermediate cavity; which is aligned in parallel and has a shape corresponding to the shape of the piece(s) to be coated.

18. The apparatus according to claim 4, wherein the outer area of the wall of the entrance cavity has a proportionally bigger shape than the shape of the piece to be coated, which gets smaller as it passes through the wall of the entrance cavity, until reaching the inner area of the wall of the entrance cavity, the dimensions at this area are exactly the same as the dimensions of the piece to be coated, this adjustment serves to fix any unevenness.

19. The apparatus according to claim 18, wherein the elimination of unevenness upon entrance of the piece into the extrusion chamber assures the alignment between the piece to be coated and the extrusion chamber, providing uniformity in the thickness of the coating material.

20. The apparatus according to claim 4, wherein the exit cavity determines the thickness of the coating material.

21. The apparatus according to claim 5, wherein the intermediate cavity generates two independent deposits for the coating material within the extrusion chamber, which allows the piece to be simultaneously coated with two different materials.

22. A method for manufacturing decorative moldings from pieces previously cut or molded of different materials, the method comprises the steps of:

- determining of the flow of the coating material;
- placing the piece to be coated on the leveled table;
- moving the piece to be coated into the extrusion chamber;
- coating the piece; and
- drying the coated piece.

23. The method according to claim 22, wherein the step of determining the flow volume of the coating material that is deposited in the extrusion chamber depends on the size and development of the shape of the piece to be coated and of the number of pieces to be coated in one single step.

24. The method according to claim 23, wherein the step of determining the flow volume of the coating material can be performed automatically or by means of a manual control of the feeding pump.

25. The method according to claim 22, wherein the step of placing the previously grooved piece to be coated on the guiding strip of the leveled table requires a total match with the guiding strip on which the piece moves, such that one of the ends of the piece to be coated contacts one of the sides of the blade.

26. The method according to claim 22, wherein the movement of the piece to be coated into the extrusion chamber is obtained by means of activation of the drive system, which causes the piece to be moved by the blade, and to be received by the entrance cavity.

27. The method according to claim 22, wherein coating of the piece is done by passing the piece to be coated through the extrusion chamber and the coating material properly adheres to the exposed surface of the piece.

28. The method according to claim 27, wherein the resulting thickness of the coating corresponds to the difference of dimensions between the entrance cavity of the extrusion chamber, which is exactly similar in shape and dimensions to the piece

to be coated, and the dimensions of the exit cavity, which is proportionally bigger, the difference in dimensions corresponds to the desired thickness of the coating.

29. The method according to claim 22, wherein the drying step of the coated piece may be selected from: (1) horizontally placing the coated piece for the process of aging the coating material; and (2) using conveying bands that receive the coated piece to take it immediately to a drying furnace.

30. The method according to claim 22, wherein the movement of the second piece to be coated into the extrusion chamber causes the first previously placed piece to be coated to move, and to leave the extrusion chamber completely coated, whereas the second piece to be coated is left partially inside the extrusion chamber, sealing the entrance cavity and the exit cavity of the same, such that the coating material contained in the extrusion chamber is not spilled.

31. The method according to claim 30, wherein the movement is unidirectional when returning the blade to its original position to place another piece to be coated into the same extrusion chamber, and to continue the process of production with the use of a single extrusion chamber.

32. The method according to claim 30, wherein the movement is bi-directional, with a double extrusion chamber, when placing another piece to be coated on the same guiding strip, at the other side of the blade, which starts a new run in reverse sense, moving another pair of pieces to be coated into a second extrusion chamber placed at the side opposite to the first.

33. The method according to claim 32, wherein the pieces to be coated have different types of moldings.